

**FAX TRANSMISSION SHEET****AQUILLA PATENTS & MARKS, PLLC**

221 COE HILL ROAD  
CENTER HARBOR, NH 03226  
PHONE: (603) 253-9474  
FAX: (603) 253-9476

---

---

**To:** Eric Hawthorne  
**Fax #:** (571) 273-0052  
**From:** Thomas T. Aquilla  
**Date:** November 16, 2006  
**Subject:** Ser. No. 10/775,634 DUPLICATES REQUESTED BY BPAI

---

TOTAL NUMBER OF PAGES, INCLUDING COVER: 9

---

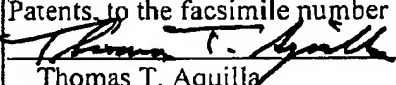
**Comments:**

Faxed with this cover sheet is the following:

**DUPLICATE COPY of Supplemental Declaration filed 7-18-05 (8 pp.)**

**CERTIFICATE OF FACSIMILE TRANSMISSION****FACSIMILE NO:** (571) 273-0052**DATE:** November 16, 2006

I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents, to the facsimile number and on the date indicated above.

  
Thomas T. Aquilla

IMPORTANT: THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE TO DELIVER IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT READING, DISSEMINATING, DISTRIBUTING OR COPYING THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE AND DESTROY THE COMMUNICATION. THANK YOU.

**COPY**

ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor: Jon D. Pearson

Serial No: 10/775,634

Filing Date: 02/10/2004

Title: INFLATABLE DEVICE FOR  
ADJUSTING THE SUPPORT  
AND COMFORT OF A  
MATTRESS

Group Art Unit: 1328

Examiner: Tara L. Mayo

**SUPPLEMENTAL DECLARATION**

MAIL STOP APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL DECLARATION UNDER 37 CFR § 1.132**

In response to the Final Rejection dated May 18, 2005, I, Jon Pearson, hereby declare and say as follows:

**BACKGROUND INFORMATION**

1. I am the owner of Jon Pearson Analytics, LLC of Mt. Airy, Maryland, and I am the sole inventor of the invention disclosed in the present application, Ser. No. 10/775,634. My *curriculum vitae*, which describes my education, employment, research publications, and other expert qualifications, is attached hereto as Exhibit 1.
2. I have read and understood patent application Ser. No. 10/775,634, including the specification and claims. I have also read and understood U.S. Pat. No. 6,665,898 issued to Gordon, U.S. Pat. No. 6,460,209 issued to Reeder *et al.*, and U.S. Pat. No. 5,787,531

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited in the U.S. Postal Service as **Express Mail No. EV710696797US** in an envelope addressed to Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 18, 2005.

\_\_\_\_\_  
Thomas T. Aquilla



ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US

issued to Pepe, cited by the Examiner in this case in support of the anticipation and obviousness rejections of the claims.

3. Based on my analysis of the contents of the aforementioned documents, as well as my knowledge of the art, I have formulated certain opinions regarding the alleged anticipation and obviousness of the claims.
4. The standard I used for anticipation was whether a single prior art reference discloses each and every element or limitation of a claim. The standard I used for obviousness was whether the combination of references cited by the Examiner would teach or suggest to a person of ordinary skill in the art each and every element or limitation of a claim, whether the prior art teaches or suggests a motivation to combine or modify the references as suggested by the Examiner, and whether a person of ordinary skill in the art would have a reasonable expectation of success.

**In response to the Examiner's Final Rejections**

5. The Examiner: *"With regard to the drawing objection to Figures 3A and 313, correction is required because the embodiment shown is not one of Applicant's invention. See page 3 at lines 14 through 17 and page 6, lines 8 through 10"*

**Response:** We can correct this if necessary. The drawing is not prior art, but a hypothetical depiction of a design that would be ineffective.

6. The Examiner: *"Furthermore, the squishing and bulging shown in the figures is attributable to the flow of fluid in the inflated apparatus which is not pressurized to a degree capable of sustaining its shape under a shift in a load applied to its top surface."*

**Response:** Correct, my design is meant to function well when filled partially or fully, thus allowing the device to "adjust" to the amount required by the user. My design will maintain its shape at varying degrees of pressure. Unlike Gordon's design, which has no means for maintaining its shape when not fully inflated. In claim 1 (col-4, Line-25) Gordon states "and inflating said bladder until said sagging region is flat". Not until the bladder is full.

7. The Examiner: *"In response to Applicant's statement Gordon '8)8 fails to disclose an apparatus having a substantially convex cross sectional shape as required by each*



ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US

*independent claim of the instant application, the Examiner directs Applicant's attention to the recitation of "convex" lobes in claims 5, 7 and 14 of the reference."*

**Response:** These references only refer to individual "lobes" within Gordon's device. The convex shape refers to my entire design. Whether it made up of multiple chambers or a single chamber with internal supports, my design maintains the overall convex shape whether fully inflated or partially inflated, or with the uneven load of a person on the mattress.

8. The Examiner: *"In response to Applicant's statement Gordon '898 fails to teach an apparatus comprising a material and constitution for maintaining the convex shape as require by claim 1 of the instant application, the Examiner contends the material forming the chamber inflatable with air meets the claimed functional limitation. As seen in Figure 3B*

**Response:** While Figure 3B in Gordon's submission does appear to show a elliptical shape, there is nothing in his disclosure that would actually produce this shape. For example, if the bladder shown in figure 3B were fully inflated, the resulting shape would be a rounded shape. And my tests have shown that, when under inflated, the device would not create the convex shape. With no additional load other than the mattress, the device actually takes on the shape of a two-dimensional hotdog (if it were shown in figure 3B). This happens for several reasons: 1) the box spring does not actually sag as shown in Gordon's figure 3B. 2) It turns out that the weight of that sagging portion of the mattress is virtually the same as the surrounding areas that have less sag. This causes an unstructured bladder to create a flat shape when under the pressure of a mattress. And as soon as additional weight (a person) is applied, the device becomes unstable. Gordon's design, at best, would create a "lump" in the center region of the mattress. This can further be confirmed by actual customer comments published by the Home Shopping Network ([www.HSN.com](http://www.HSN.com)), where a customer writes: "I COULD FEEL IT UNDER MY MATTRESS FELT LIKE I WAS ON A RUBBER DOUGHNUT."

9. The Examiner: *"and disclosed in column 2 at lines 38 through d 44 and column 3 at lines 3 through 6, the mattress maintains its shape under the weight of a mattress. Furthermore, the apparatus shown by Gordon '898 is capable of being inflated to a degree that it will maintain its shape under the additional weight of a person*



**COPY**

ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US

**Response:** It can maintain a flattened round shape (if fully inflated only), but it cannot maintain a tapered convex shape as shown in figure 3B.

10. The Examiner: *"In response to Applicant's statement the device shown by Gordon '898 is not capable of controlling the "firmness, support and sag of the majority of a single sleeping area" as disclosed on page 2 at lines 25 through 26 of the instant application, the Examiner notes Gordon '898 expressly teaches use of the prior art device for correcting sag where the greatest portion of a sleeper's weight is located (col 2 lines 38 through 44) As each of independent claims 1 and 7 recite "a set of dimensions large enough to adjust firmness, support, or sag for the majority of an area of the mattress used by the person", the claimed limitation is met by the prior art device whereby the broadest reasonable interpretation of "the majority of an area of the mattress used by the person" corresponds to the center region of the mattress as taught by Gordon '898.*

**Response:** The phrase "a set of dimensions large enough to adjust firmness, support, or sag for the majority of an area of the mattress used by the person", was designed to say exactly the opposite. As apposed to a smaller device that is limited to the center region of the mattress, my device is intended for the "majority of the area of a mattress used by a person". The size and tapered convex shape are critical to avoid a "lump" or "bump" in the mattress. The reason that it is worded in this way is to differentiate it from simply a back support or lumbar support. Also, since my design is would fit a single bed, two would be used on a king sized bed. And because of the overall convex shape of the product, two overlapping devices would be used on a queen or full size bed. Thus allowing the single shape and design to be used for any size mattress.

#### **Product Testing - Experiment**

11. The following experiment was conducted July 1st, 2005 on a device called "MattressRX". This device is the actual product that is produced and sold with Gordon's patent #6,665,898. The experiment uses the device filled to three levels: 1) Fully filled, 2) approximately half filled, and 3) minimally filled (approximately 1/10th filled)
12. The photo #1 (below) shows that when the device is fully inflated, it becomes approximately 14 inches thick. A device that is ballooned to this thickness is of little use in correcting a sagging mattress.

**COPY**

ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US



Photo #1

13. As the photo below shows, a fully inflated device would be of little use because the device lacks the means to create the convex shape and would completely lift the mattress off of the box spring.

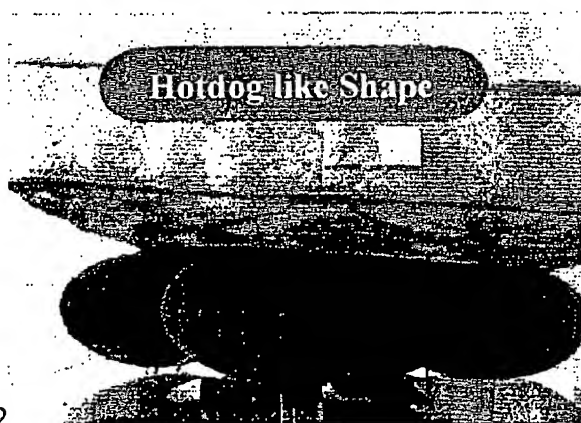


Photo #2

Notice the "hotdog" like shape that is produced. The top and bottom are flattened between the mattress and box spring and the edges are rounded, not tapered.

**COPY****ATTORNEY DOCKET NO. JPA-1  
EXPRESS MAIL LABEL NO. EV710696797US**

14. When the device is approximately half inflated, as shown in photo #3, the edges remain rounded. This photo was taken from underneath the device through a glass surface. The dark green portion of the device is the flattened portion that is pressed against the box spring (glass surface). The lighter green area of the device show the rounded edges that are not in contact with either the mattress or box spring. Based on the distribution of weight on the mattress, the unsupported portion of the mattress between the edge of the device and the point where the mattress comes in contact with the box spring is a minimum of 6 inches. This caused a bump or lump because the edges are not tapered in the convex shape.

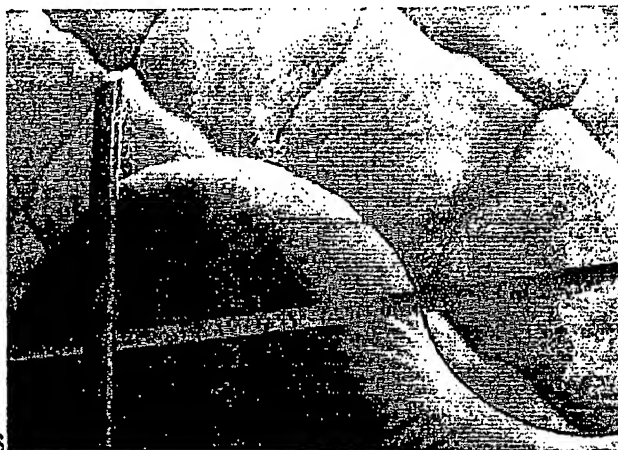


Photo #3

15. When the device appears to be filled to the optimum level as it is described in the directions, it is only about 1/10th inflated. At this inflation level the device is unable to maintain any consistent shape. When an adult simply rolls from side to side, as shown in the photo #4 (below), the device changes shape dramatically as air is shifted from side to side. This causes the device to become very unstable and the convex shape is not present in any way.